

Patent claims

1. A method for producing an overend take-off  
5 crosswound bobbin (1), in which at least one thread (4)  
is wound on with a pitch angle ( $\alpha$ ) which can be varied  
during the winding operation, characterized in that one  
or more thread layers having parallel windings (17) are  
produced at certain time intervals.
- 10 2. A method for producing an overend take-off  
crosswound bobbin (1), in which at least one thread (4)  
is wound on with a pitch angle ( $\alpha$ ) which can be varied  
during the winding operation, characterized in that the  
15 pitch angle ( $\alpha$ ) increases on average, as seen over a  
number of thread layers (6), with increasing bobbin  
diameter (D).
3. The method as claimed in claim 1, characterized in  
20 that the parallel windings (17) start at a distance (a)  
after one bobbin edge (8) and/or end at a distance (b)  
before the other bobbin edge (10).
4. The method as claimed in one of claims 1 to 3,  
25 characterized in that the pitch angle ( $\alpha$ ) is kept  
substantially constant over a certain period of time  
and is increased on reaching a defined bobbin diameter  
(D) which, in turn, is then kept substantially constant  
over a certain period of time.
- 30 5. The method as claimed in one of claims 1 to 4,  
characterized in that the thread (4) is wound on with a  
varying traversing stroke (H).
- 35 6. The method as claimed in one of claims 1 to 5,  
characterized in that a traversing stroke (H) which is  
reduced by comparison with the bobbin width (B) is  
displaced at least periodically along the bobbin width  
(B).

7. The method as claimed in one of claims 1 to 6, characterized in that the pitch angle ( $\alpha$ ) is varied with changing direction of displacement (V).

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8. An overend take-off crosswound bobbin (1) having at least one thread (4) wound on with a variable pitch angle ( $\alpha$ ), characterized in that the crosswound bobbin (1) has one or more thread layers having parallel windings (17).

9. An overend take-off crosswound bobbin (1) having at least one thread (4) wound on with a variable pitch angle ( $\alpha$ ), characterized in that the pitch angle ( $\alpha$ ) of thread layers (6) situated to the inside is on average, as seen over a number of thread layers (6), smaller than that of thread layers (6) situated further to the outside.

10. The crosswound bobbin as claimed in claim 8, characterized in that the parallel windings (17) start at a distance (a) after one bobbin edge (8) and/or end at a distance (b) before the other bobbin edge (10).

11. The crosswound bobbin as claimed in one of claims 8 to 10, characterized in that the pitch angle ( $\alpha$ ) is substantially constant over certain regions of thread layers (6), and in that the average pitch angle ( $\alpha$ ) of a region situated to the inside is smaller than that of a region situated further to the outside.

12. The crosswound bobbin as claimed in one of claims 8 to 11, characterized in that there are thread layers (6) which are wound on with a varying traversing stroke (H).

13. The crosswound bobbin as claimed in one of claims 8 to 12, characterized in that thread layers (6) produced with a traversing stroke (H) which is reduced

by comparison with the bobbin width (B) are wound on at least partially along the bobbin width (B) with an offset with respect to one another.

- 5 14. The crosswound bobbin as claimed in one of claims 8 to 13, characterized in that the pitch angle ( $\alpha$ ) is varied with changing direction of displacement (V).